Water System Capacity Development Program

Demonstration, Implementation and Evaluation of Authorities to Ensure New System Capacity

August 31, 1999

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Acronym Reference List

CWSSA - Critical Water Supply Service Area

CWSP - Coordinated Water System Plan

DOH - Department of Health

DWSRF - Drinking Water State Revolving Fund

EPA - Environmental Protection Agency

GWI - Ground Water Under the Influence of Surface Water

JPO - Joint Plan of Operations

LHJ - Local Health Jurisdiction

MOU - Memorandum of Understanding

NTNC - Non-Transient Non-Community

O & M - Operation and Maintenance

RCW - Revised Code of Washington

SDWA - Safe Drinking Water Act

SMA - Satellite Management Agency

SWSMP - Small Water System Management Program

TMF: - Technical, Managerial and Financial Capacity

T - Technical Capacity

M - Managerial Capacity

F - Financial Capacity

WAC - Washington Administrative Code

WSP - Water System Plan

Introduction

Washington State defines system capacity as the technical, operational, managerial, and financial capability to achieve and maintain compliance with all applicable local, state and federal drinking water regulations. This definition is included in proposed Washington Administrative Code (WACs) 246-290 currently under revision with an anticipated adoption date in January 1999.

The four elements of system capacity (i.e., technical, operational, managerial, and financial capability), are four independent but related elements. Technical capability refers to the physical infrastructure of the water system, including but not limited to the source water adequacy, infrastructure adequacy, and technical knowledge. Operational capability refers to the functions needed to operate the system in compliance with all applicable requirements, including but not limited to water quality monitoring and routine service functions. Management capability refers to the management structure of the water system, including but not limited to ownership accountability, staffing and organization, and effective linkages. Financial capability refers to the financial resources of the water system, including but not limited to the revenue sufficiency, credit worthiness, ability to obtain financing, and fiscal controls.

The Safe Drinking Water Act (SDWA) Amendments of 1996 contain three key capacity development provisions. The first provision requires states to obtain the legal authority or other means to ensure that new community and non-transient non-community water systems are created with capacity. The second provision requires states to develop and implement a strategy to assist existing public water with acquiring and maintaining capacity. The third provision requires states to assess and only award Drinking Water State Revolving Funds (DWSRF) to systems that currently have capacity or systems that will acquire capacity by obtaining the DWSRF assistance.

In satisfying the key provisions, Washington State will document how it will use many of its existing programs. In particular, Washington State will use the authority of the following three existing programs as the core of its overall capacity development program: the water system planning program, the operating permit program and the assurance program. Washington will use the three core elements in different ways when satisfying the three key capacity provisions.

This document outlines how Washington State will satisfy the first provision identified in Section 1420 of the SDWA, the requirement for states to obtain the legal authority or other means to ensure all new community water systems and new non-transient, non-community water systems commencing operation after October 1, 1999 demonstrate technical, managerial and financial capacity with respect to each national primary drinking water regulation in effect, or likely to be in effect, on the date of commencement of operations.

Washington State will demonstrate this authority through use of statutes (Revised Code of Washington, RCWs) rules (WACs) and other means (e.g., policies, memorandums of

understanding, etc.). Washington State has used the <u>Guidance and Information for States on Implementing the Capacity Development Provisions of the Safe Drinking Water Act</u>, published in the Federal Register on February 5, 1998 to scope and develop this document.

This report contains the following two sections:

- I. Demonstration of Authorities to Ensure New System Capacity
 - A. Description of Existing Authorities
 - B. Description of Planned Authorities
- II. A Plan for Implementing and Evaluating the Authorities that Ensure New System Capacity

I. Demonstration of Authorities to Ensure New System Capacity

A. Description of Existing Authorities

Washington State Department of Health has several elements in the new system development process that prevent the creation of systems that do not demonstrate capacity. There are twelve elements that ensure all new systems demonstrate system capacity.

Discussion on each element will include information on the five following subjects:

- 1) Authority A broad description of the type of requirement, program, or function designed to ensure capacity.
- 2) Control point identifies the control point in the development of the new system where authority is exercised.
- 3) Basis of authority References the RCW, WAC, Policy or other processes empowering the authority.
- 4) Agency vested with authority Identifies party responsible for carrying out authority.
- 5) Type of capacity assessed under authority Describes specific elements of capacity assessed under each authority.

The chart on the next page provides an overview of the existing authorities that enable Washington State to ensure that new systems demonstrate capacity.

A. – Existing Authorities Summary Chart

#	Authority	Control Point	Basis of Authority RCW / WAC / Policy Reference	Agency Vested With Authority	Type of Capacity Assessed
1	WSP Document Requirement	DOH will not approve a new system until that system has a WSP approved.	RCW 43.20.050 (2), WAC 246-290-100	DOH	TMF
2	SMA Requirement for New Systems	With limited exceptions, DOH and some LHJs, by agreement, will not allow the creation of a new system unless that system is owned or managed and operated by an approved SMA. Conditions are placed on all approval documents for new systems.	RCW 70.119A.060 (2)	DOH LHJ	TMF
3	Operating Permit Requirement	A new system must obtain an operating permit before it may be operated.	RCW 70.119A.100 (4) WAC 246-294-030	DOH	TMF
4	"Adequacy" Requirement	Several Washington statutes require local governments to make written findings regarding provisions for potable water supplies or adequacy of water supply when considering short plan subdivisions or individual building permit applications.	RCW 19.27.097 RCW 58.17.060 and RCW 58.17.110	Local Governments	TMF
5	Certified Operator Requirements	A certified operator is required for all new Group A to be served by a surface water source and those new Group A systems serving more than 100 connections.	RCW 70.119.030 WAC 246-292-020	DOH	TM
6	Establishment of critical water supply service area (CWSSA) boundaries	In CWSSAs, new systems may not be created in the service area of an existing system. Water system applicants are directed to existing systems for service in claimed service areas in CWSSAs, rather than allowing new systems to be formed.	RCW 70.116.060 WAC 246-293-190	DOH	TMF
7	WSP Required Before Project Reports or Construction Documents Will be Considered	DOH regional office staff will only review submitted project reports and construction document for proposed new systems if there is a current approved water system plan and the plan adequately addresses the projects.	RCW 43.20.050 (2) WAC 246-290-100	DOH	TMF
8	Source Approval Requirement	No new source, previously unapproved source, or modification of an existing source shall be used as a public water system without department approval.	RCW 43.20.050 (2) WAC 246-290-130	DOH	TM

A. - Existing Authorities Summary Chart (continued)

#	Authority	Control Point	Basis of Authority RCW / WAC / Policy Reference	Agency Vested With Authority	Type of Capacity Assessed
9	Project Report Approval Requirement	Purveyors must receive approval for project reports (including projects associated with creating a new system) before they can begin construction. Illegal construction can be stopped (see	RCW 43.20.050 (2) WAC 246-290-110	DOH	TMF
		Authority 11).			
10	Construction Document Approval Requirement	Purveyors must receive approval for construction documents (including projects associated with creating a new system) before they can begin construction. Illegal construction can be stopped (see Authority 11).	RCW 43.20.050 (2) WAC 246-290-120	DOH	TMF
11	Stop Work Order Powers	DOH can issue a departmental order to stop work if it determines that a system is being created without the necessary approvals.	WAC 246-290-050	DOH	TMF
12	Water Right Permit Requirement	To withdraw water to put to beneficial use, a new system applicant must have a water right. Parties requesting new water rights for new systems are required to have a current approved WSP.	RCW 90.03.250, RCW 90.44.050 WAC 246-290-130 DOH Ecology MOU	Department of Ecology	TM

Authority 1 - Water System Plan (WSP) Document Required

Control Point 1

All new systems are required to develop and receive approval on their WSP before they can commence operations.

Basis of Authority 1

RCW 43.20.050 (2) states:

In order to protect public health, the state board of health shall:

- (a) Adopt rules necessary to assure safe and reliable public drinking water and to protect the public health. Such rules shall establish requirements regarding:
 - (iv)Public water system planning and emergency response requirements...

WAC 246-290-100 (2) states:

Purveyors of the following categories of public water systems shall ensure the development and submittal of a water system plan for review and approval by the department...

(f) All new systems.

Agency vested with authority 1

Department of Health

Type of capacity assessed under authority 1

WSPs are comprehensive planning documents where a system is required to identify and propose actions to address its needs (including technical, managerial and financial) to achieve and maintain compliance with relevant local, state, and federal laws. The WSP also serves as the vehicle for systems to demonstrate compliance with certain requirements (e.g., wellhead protection, conservation, cross connection control program, etc.).

WAC 246-290-100 (4) states:

The Water System Plan shall address the following elements as a minimum for a period of at least twenty years into the future. A department guideline titled *Planning Handbook* is available to assist the utility in adequately addressing these elements:

- (a) Basic water system planning data;
- (b) Existing system analysis;
- (c) Planned improvements;
- (d) Conservation;

- (e) Source of supply analysis when additional water rights are being pursued;
- (f) Financial viability;
- (g) Consistency with adjacent water system plans;
- (h) Consistency with applicable land use plans;
- (i) Supporting maps;
- (j) Operations program;
- (k) Ownership and management;
- (1) State Environmental Policy Act; and
- (m) Source water protection, including a watershed control program...

The Department uses a WSP submittal form that includes a checklist of the items that must be addressed. The department distributes this form anyone in the process of developing a WSP. The department suggests that the system review the checklist and confirm that all of the items are included in their WSP before they submit the plan, as the department uses this checklist in its review.

A chart containing the checklist in the WSP has been included below. For illustrative purposes, four additional columns indicating, Technical (**Tech**), Operational (**Oper**), Managerial (**Manage**), and Financial (**Financial**) Capability have also been added. These columns indicate what aspect of capacity is developed in each of the required elements in the WSP checklist and correlate to the definitions for the capacity elements contained in the introduction.

Water System Planning Handbook Chapter Content - Capacity Criteria Identification		Oper	Manage	Financial
Chapter 1 - Description of Water System				
Ownership and Management			X	X
System Background			X	
Inventory of Existing Facilities			X	
Related Plans (e.g., CWSP)			X	
Existing and Future Service Area Characteristics			X	
Agreement			X	
Map			X	
Service Area Policies			X	
Chapter 2 - Basic Planning Data				
Current Population, Number of Service Connections, and				
ERUs	X		X	
Current Water Use and Data Reporting			X	

Water System Planning Handbook Chapter Content - Capacity Criteria Identification	Tech	Oper	Manage	Financial
Current and Future Land Use	X		X	
Future: Population Number of service Connections and ERUs (6 and 20 years)	X		X	
Future Water Use (Demand Forecast for 6 and 20 years)	X		X	
Chapter 3 - System Analysis				
System Design Standards	X		X	
Water Quality Analysis	X		X	
System Description and Analysis	X		X	
Source	X		X	
Water Treatment	X		X	
Storage	X		X	
Distribution System/Hydraulic Analysis	X		X	
Summary of System Deficiencies	X		X	X
Analysis of Possible Improvements	X		X	X
Chapter 4 - Conservation Program and Source of Supply Analysis				
Conservation Program			X	
Water Right Analysis	X		X	
Source of Supply Analysis	X		X	
Water Right Reliability Analysis With Water Shortage Response Plan	X		X	
Interties	X		X	
Chapter 5 - Source Water Protection				
Wellhead Protection Program	X		X	X
Watershed Control Program	X		X	X
Chapter 6 - Operation and Maintenance Program				
Water System Management and Personnel	X	X	X	
Operator Certification	X	X	X	
System Operations and Control	X	X	X	
Routine Operating Procedures, Preventive Maintenance and Record Keeping	X	X	X	
Water Quality Sampling Procedures (Comprehensive	X	X	X	

Monitoring Plan)				
Coliform Monitoring Plan	X	X	X	
Water System Planning Handbook Chapter Content - Capacity Criteria Identification	Tech	Oper	Manage	Financial
Emergency Response Program	X	X	X	
Safety Procedures	X	X	X	
Cross-Connection Control Program	X	X	X	
Customer Complaint Response Program		X	X	
Summary of O & M Deficiencies		X	X	X
Chapter 7 - Distribution Facilities Design and Construction Standards				
Standard Construction Specifications for Distribution Mains	X	X	X	
Design and Construction Standards for Distribution	X	X	X	
Related Projects including Internal Engineering Review				
Procedures (i.e., Alternative Review				
Chapter 8 - Improvement Program				
Selection and Justification of Proposed Capital Improvement Projects	X		X	X
Selection and Justification of Non- Capital Improvement Projects	X		X	X
Improvement Program (6 and 20 years)	X		X	X
Chapter 9 - Financial Program				
Identification of Cost of Capital and Non-Capital Improvements	X		X	X
Identification of Annual O & M Expenses	X	X	X	X
Six-Year Balanced Operating Budget	X		X	X
Discussion of Water Rates Including Proposed Increases and Rate Structures	X		X	X
Financial Viability Test (for systems serving less than 1000	X		X	X
UTC Financial Viability and Feasibility Test (for UTC Regulated Systems.	X		X	X
Chapter 10 - Miscellaneous Documents				
County/Adjacent Utility Correspondence			X	
State Environmental Policy Act (SEPA) Determination			X	

Agreements		X	
Satellite Management Program	X	X	X

Several of the items in the checklist above address more than one element of capacity, some address all four. Several of the elements of the WSP are stand alone requirements in separate WACs or RCWs (e.g., Wellhead protection, Operations Program, Coliform Monitoring, etc.). The planning requirements collect these independent requirements in one place to make the job of satisfying requirements easier.

By requiring all new systems to develop a WSP and to submit their WSP for review and approval before the system can be created, the department's WSP requirement ensures that all new systems are created with capacity.

Authority 2 – Satellite Management Agency (SMA) Requirement for New Systems

Control point 2

DOH will not approve or allow the creation of a new system unless that system is owned or managed and operated by Approved SMA. If an SMA is not available, the system's approval is conditioned upon the periodic review of the system's operational history to determine its ability to meet the department's financial viability and other operating requirements. If, upon periodic review, the department determines that the system is in violation of its financial viability or other operating requirements, the department may direct this system to an approved SMA for ownership or management and operations, if such ownership or management and operations can be made with reasonable economy and efficiency.

Basis of authority 2

RCW 70.119A.060 (2) states:

No new public water system may be approved or created unless:

(a) It is owned or operated by a satellite system management agency established under RCW 70.116.134 and the satellite system management agency complies with financial viability requirements of the department;

or

(b) A satellite management system is not available and it is determined that the new system has sufficient management and financial resources to provide safe and reliable service.

The approval of any new system that is not owned by a satellite system management agency shall be conditioned upon future management or ownership by a satellite system management agency, if such management or ownership can be made with reasonable economy and efficiency, or upon periodic review of the system's operational history to determine its ability to meet the department's financial viability and other operating requirements. The department and local health jurisdictions shall enforce this requirement under authority provided under this chapter, chapter 70.116, or 70.05 RCW, or other authority governing the approval of new water systems by the department or a local jurisdiction.

Agency vested with authority 2
Department of Health
Local Health Jurisdictions

Type of capacity assessed under authority 2

An SMA is defined in WAC 246-290-010 as a person or entity approved by the Division of Drinking Water (Division) to own or operate more than one public water system on a regional or county-wide basis, without the necessity for a physical connections between such water systems. The philosophy behind the SMA program is to establish approved SMAs that can retain qualified staff to provide a high level of service.

Parties interested in becoming approved SMAs follow a submittal and approval process identified in WAC 246-295-040 where they must demonstrate their experience and ability to serve more than one system. By having new systems formed under the ownership or management and operations of an SMA, DOH's SMA program is designed to ensure that new systems are operated by qualified staff that have technical, managerial and financial capacity.

Authority 3 – Operating Permit Requirement

Control point 3

A new system must obtain an operating permit before that system may be operated. The owner of a new Group A system must receive all required departmental approvals relating to water system operation before he or she can receive an operating permit.

Basis of authority 3

RCW 70.119A.100 (4) states:

Existing drinking water programs at both the state and local government level need additional authorities to enable them to more comprehensively and systematically address the needs of the public water systems of this state and assure that the public health and safety of its citizens are protected.

Therefore, annual operating permits requirements shall be established in accordance with this chapter. The operating permit requirements shall be administered by the department and shall be used as a means to assure that public water systems provide safe and reliable drinking water to the public...The department may impose permit conditions, requirements for system improvements, and compliance schedules in order to carry out the purpose of this act.

WAC 246-294-030 (1) states:

No person may operate and no owner shall permit the operation of a Group A water system unless the owner annually submits an application along with the required fee to the department and the department has issued an operating permit to the system owner...

WAC 246-294-030 (3) states:

In addition to the schedule outline in subsection (2) of this section (timing of operating permit distribution based on system size), new or revised operating permits shall be required when:

(a) The owner of a new Group A system receives all required departmental approvals relating to water system operation...

Agency vested with authority 3

Department of Health

Type of capacity assessed under authority 3

The department reviews criteria and issues an operating permit for new and existing systems. There are currently four permit colors a water system may receive. The color of the permit is determined by evaluating compliance with eight criteria listed in WAC 246-294-040. New systems must satisfy criteria under WAC 246-294-040 (2) as part of the approval process.

Operating Permit Categories

Category (Color)	Basic Description	Compliance with Criteria
Green	Substantial Compliance	Meets all criteria (1-8)
Yellow	Conditional Compliance	Does not meet one or more criteria (5-8)
Red	Substantial	Does not meet one or more criteria (1-4)
	Noncompliance	
Blue	Undetermined	System will be evaluated at later date

By requiring all new systems to obtain an operating permit and only granting an operating permit to new systems after they have received "all required departmental approvals relating to water system operation...." (e.g., WSP, construction documents, source approval, etc.), the department's operating permit program is designed to ensure systems have capacity.

Authority 4 - "Adequacy" Requirement

Control point 4

Several Washington statutes require local governments to make written findings regarding provisions for potable water supplies or adequacy of water supply when considering short plan subdivisions or individual building permit applications.

Basis of authority 4

RCW 58.17.110, 19.27.097, and 58.17.060

RCW 58.17.110 states:

- (1) The city, town, or county legislative body shall inquire into the public use and interest proposed to be served by the establishment of the subdivision and dedication. It shall determine: (a) If appropriate provisions are made for, but not limited to, the public health, safety, and general welfare, for open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies...; and (b) whether the public interest will be served by the subdivision and dedication.
- (2) A proposed subdivision and dedication shall not be approved unless the city, town, or county legislative body makes written findings that: (a) appropriate provisions are made for the public health..., potable water supplies...; and (b) the public interest will be served by the platting of such subdivision and dedication...

RCW 58.17.060 states:

The legislative body of a city, town, or county shall adopt regulations and procedures and appoint administrative personnel for the summary approval of short plats and short subdivisions or alteration or vacation thereof. When an alteration or vacation involves a public dedication, the alteration or vacation shall be processed as provided in RCW 58.17.212 or 58.17.215. Such regulations shall be adopted by ordinance and shall provide that a short plat and short subdivision may be approved only if written finding that are appropriate, as provided in RCW 58.17.110....

RCW 19.27.097 states:

Each applicant for a building permit of a building necessitating potable water shall provide evidence of an adequate water supply for the intended use of the building. Evidence may be in the form of a water right permit form the department of ecology, a letter from an approved water purveyor stating the ability to provide water, or another form sufficient to verify the existence of an adequate water supply. In addition to other authorities, the county or city may

impose conditions on building permits requiring connection to an existing public water system when the existing system is willing and able to provide safe and reliable potable water to the applicant with reasonable economy and efficiency. An application for a water right shall not be sufficient proof of an adequate water supply....

DOH Adequacy Policy J.26

Requests pertaining to the status of water systems shall be addressed by the Department of Health, Division of Drinking Water (Division), using a standardized consistent procedure known as *adequacy responses*. Adequacy responses shall be based on the operating permit criteria.

Agencies other than the Division, such as counties and lending institution, are responsible for making the actual decisions whether a building permit should be issued or a loan approved.

Agency vested with authority for authority 4 Local Governments

Type of capacity assessed under authority 4

DOH, upon request, can make a determination of a system's adequacy by examining the system's operating permit status using the operating permit criteria in WAC 246-290-040. Local governments can request these determinations free of charge from DOH when preparing to make a written determination of adequate water supply. This partnership between DOH and local governments is designed to prevent the creation of new inadequate systems.

Authority 5 – Certified Operator Requirements

Control point 5

A new public water system must have a certified operator if it 1) is to be served with a surface water source, or 2) serves more than 100 connections.

Basis of authority 5

RCW 70.119.030 (Certified operators required for certain public water systems) states:

- (1) A public water system shall have a certified operator if:
 - (a) It is a group A water system, or
 - (b) If it is a public water system using a surface water source or a ground water under the direct influence of surface water.....
- (4) The department shall, in establishing by rule or otherwise the requirements for public water systems with fewer than one hundred connections, phase in such requirements in order to assure that (a) an adequate number of certified operators are available to serve the additional systems....The department shall not require a certified operator for a system with fewer than one hundred connections unless the system is determined by the department to be in significant noncompliance with monitoring, or water quality standards which would put the public health at risk....

WAC 246-292-020 states:

- (1) All Group A water systems shall have at least one certified operator as required under WAC 246-292-050 if the systems:
 - (a) Serves one hundred or more services in use at anyone time; or
 - (b) Has a surface water or GWI source....

Agency vested with authority 5

Department of Health

Type of capacity assessed under authority 5

The requirement for new systems 1) to be served with surface water systems or ground water systems under the direct influence of surface water or 2) serving more than 100 connections to employ a certified operator is designed to ensure that these systems have technical and managerial capacity.

Authority 6 – Establishment of Critical Water Supply Service Area (CWSSA) Boundaries

Control point 6

A new public water system shall not be created inside a critical water supply service area, recognized in an approved Coordinated Water System Plan (WSP), unless authorize by DOH.

Basis of authority 6

WAC 246-293-190 states:

Establishment of critical water supply service area boundaries-Effect. (1) No new public water system shall be approved within a critical water supply service area subsequent to establishment of external boundaries unless specifically authorized by the department. Authorization shall be based upon compliance with the following:

- (a) If unanticipated demand for water supply occurs within a purveyor's future service area, the following shall apply in the listed sequence:
 - (i) The existing purveyor shall provide service in a timely and reasonable manner consistent with state board of health regulations; or
 - (ii) A new public water system may be developed on a temporary basis. Before authorization a legal agreement will be required which includes a schedule for the existing purveyor to assume management and/or connect the new public water system to the existing system; or
 - (iii) A new public water system may be developed. Before authorization, a revised service area agreement establishing the new purveyor's future service area will be required.
- (b) If a demand for water supply occurs outside any purveyor's future service area, the following shall apply in the listed sequence:
 - (i) Those persons anticipating the need for water service shall contact existing nearby purveyors to determine whether any will be interested in expanding their system to provide water service in a timely and reasonable manner consistent with state board of health regulations.
 - (ii) A new public water system may be developed. Any of the options in subdivisions (b) (i), (b) (ii), (b) (iii) will require establishment of new or revised service area agreements.

Agency vested with authority 6

Department of Health

Type of capacity assessed under authority 6

The requirement for those seeking water service in a claimed service areas in a CWSSA, to get service from existing systems is designed to prevent the creation of new unnecessary systems. The underlying purpose of this authority is to direct service to these existing systems with proven capacity.

Authority 7 – Approved WSP Required Before Project Reports and Construction Documents to be Considered

Control point 7

DOH regional office staff will only review submitted project reports and construction document for proposed new systems if there is a current approved WSP and the WSP adequately addresses the projects.

Basis of authority 7

RCW 43.20.050 (2) (see Basis of Authority for Authority 1)

WAC 246-290-100 (9) states:

Project reports and construction documents submitted for approval per WAC 246-290-110 and 246-290-120 by purveyors required to have a water system plan, will not be considered for approval unless there is a current approved water system plan and the plan adequately addresses the project.

Agency vested with authority 7

Department of Health

Type of capacity assessed under authority 7

Same as Authority 1 (Water System Plan)

Authority 8 – Source Approval Requirement

Control point 8

A party seeking to use a new source as a public water supply must first get department approval for that source.

Basis of authority 8

WAC 246-290-130 (1) states:

No new source, previously unapproved source, or modification of an existing source shall be used as a public water supply without department approval.

Agency vested with authority 8

Department of Health

Type of capacity assessed under authority 8

The requirement for new systems to get a new source approved before that source can be used is designed to ensure that new systems have technical and managerial capability.

Authority 9 - Project Report Requirement

Control point 9

Purveyors must receive approval for project reports (including projects associated with creating a new system) before they can begin construction. Illegal construction can be stopped (see Authority 11).

Basis of authority 9

RCW 43.20.050 (2) (see Basis of Authority for Authority 1)

WAC 246-290-110 (2) states:

The purveyor shall submit project reports to the department for written approval prior to installation of any new water system, water system extension, or improvement with the following exceptions:...

Agency vested with authority 9

Department of Health

Type of capacity assessed under authority 9

Same as Authority 1 (Water System Plan)

Authority 10 – Purveyors must Receive Approval for Construction Documents (Including Projects Associated with Creating a new System) Before Construction can Begin

Control point 10

Purveyors must receive approval for construction documents (including projects associated with creating a new system) before they can begin construction. Illegal construction can be stopped (see Authority 11).

Basis of authority 10

RCW 43.20.050 (2) (see Basis of Authority for Authority 1)

WAC 246-290-120 (2) states:

The purveyor shall submit construction documents to the department for written approval prior to installation of any new water system, water system extension, or improvement with the following exceptions:...

Agency vested with authority 10

Department of Health

Type of capacity assessed under authority 10

Same as Authority 1 (Water System Plan)

Authority 11 – Stop Work Order Powers

Control point 11

DOH can issue a departmental order to stop work if it determines that a system is being created without the necessary approvals.

Basis of authority 11

WAC 246-290-050 states:

When any purveyor is out of compliance with these rules, the department may initiate appropriate enforcement actions, regardless of any prior approvals issued by the department. These actions may include any one or combination of the following...

(5) Departmental order to stop work and /or refrain from using any public water system or improvements thereto until all written approvals required by statute or rule are obtained.

Agency vested with authority 11

Department of Health

Type of capacity assessed under authority 11

The necessary approvals include the creation of a water system plan that addressed all elements of capacity (Same as for Authority 1 (Water System Plan))

Authority 12 - Water Right Permit Requirement

Control point 12

In accordance with a Memorandum of Understanding (MOU) with the Department of Ecology (the agency responsible for the state's water resource program), to withdraw water to put to beneficial use, a new system applicant must have a water right. Parties requesting water rights for new systems are required to have a current approved WSP.

Basis of authority 12

RCW 90.03.250, RCW 90.44.050, Memorandum of Understanding

RCW 90.03.250 states:

Any person, municipal corporation, firm, irrigation district, association, corporation or water users' association hereafter desiring to appropriate water for a beneficial use shall make an application to the department for a permit to make such appropriation, and shall not use or divert such waters until he has received a permit from the department as in this chapter provided...

RCW 90.44.050 states:

After June 6, 1945, no withdrawal of public ground waters of the state shall be begun, nor shall any well or other works for such withdrawal be constructed unless an application to appropriate such water has been make to the department and a permit has been granted by it as herein provided...

Memorandum of Understanding (originally signed in October 1992)

In situations where WSPs are required by DOH, a current and approved WSP must be in place prior to final issuance of new water right permits by Ecology. Additionally, systems must demonstrate that proposed new source developments are consistent with improvements identified in their WSP.

Agency vested with authority 12

Department of Ecology

Type of capacity assessed under authority 12

Same as Authority 1 (Water System Plan)

Summary of Existing Authorities and Transfer of Authorities

The twelve authorities listed enable Washington to require new systems to demonstrate technical, managerial, and financial capacity with respect to each national primary drinking water regulation in effect on the date of commencement of operations.

WAC 246-290-030 allows DOH and the health officer for each local health jurisdiction to develop a joint plan of operation (JPO). This JPO must:

- (a) List the roles and responsibilities of each agency;
- (b) Specifically designate those Group A systems for which the Department and local health office have primary responsibility;
- (c) Provide for a minimum level of water system supervision;
- (d) Be signed by the Department and the local health department or district; and
- (e) Be reviewed at least once every five years and updated as needed....

If a local health jurisdiction entered into a JPO and has agreed to perform duties of the drinking water program, including approving new systems, that JPO must indicate that the LHJ will enforce rules and regulations no less stringent than DOH.

B. Description of Planned Authorities

In addition to the existing authorities, Washington State plans on adding new authorities to further ensure that new systems have capacity. Washington State is in the process of revising its Administrative Codes regulating Group A public water systems. One revision proposes to change the type of planning requirement for New NTNC systems. Instead of requiring a WSP for new NTNC systems, Washington will require the development and approval of a SWSMP.

Washington State is also considering expanding the requirement for certified operators to include all Group A systems in conjunction with the new guidelines currently being developed by EPA.

Discussion on this planned authority will follow the same format as the existing authority section:

The chart on the next page provides an overview of the planned authorities that will enable Washington State to further ensure that new systems demonstrate capacity.

B. Planned Authorities Summary Chart

#	Authority	Control Point	Basis of Authority RCW / WAC / Policy Reference	Agency to be Vested with Authority	Type of Capacity Assessed
1	SWSMP Document	Requires development and submittal of SWSMP for	RCW 43.20.050(2)	DOH	TMF
	Requirement	all new NTNC systems.	WAC 246-290-105		
2	Certified Operator	Requirement for all Community and NTNC Group A	RCW 70.119.030	DOH	TM
	Requirement	systems to have a certified operator.	Authority Revision		
			Needed		

Planned Authority 1 – Small Water System Management Program (SWSMP) Requirement for New Group A NTNC Water Systems

Planned control point 1

All new NTNC systems will be required to develop and receive approval on their SWSMP before they can commence operations.

Planned basis of authority 1

Proposed WAC 246-290-105 states:

The department shall have the authority to require submission of this program (Small Water System Management Program) for review and approval when:

(f) A new Non Transient Non Community system is proposed.

Agency to be vested with planned authority 1

Department of Health

Type of capacity assessed under planned authority 1

Draft WAC 246-290-105 states:

A Small Water System Management Program shall address the following elements:

- (a) System Management
- (b) Annual Operating Permit
- (c) Water Facilities Inventory Form
- (d) Service Area and Facility Map
- (e) Documentation of Water Right
- (f) Record of Source Water Pumped
- (g) Water Usage
- (h) Water Conservation Program
- (i) Source Protection
- (j) Component Inventory and Assessment
- (k) List of System Improvements
- (l) Water Quality Monitoring Program
- (m)Operation and Maintenance Program
- (n) Cross-connection Control Program
- (o) Emergency Respon
- (p) se Plan, and
- (q) Budget.

A chart containing the sixteen elements of the SWSMP has been included below. For illustrative purposes, four additional columns indicating, Technical (**Tech**), Operational (**Oper**), Managerial (**Manage**), and Financial (**Financial**) have also been added. These columns indicate what element of capacity is developed in each of the required elements in the SWSMP checklist.

Small Water System Management Program Elements Content - Capacity Criteria Identification	Tech	Oper	Manage	Financial
Element 1 – System Management			X	
Element 2 – Annual Operating Permit	X		X	X
Element 3 – Water Facilities Inventory Form	X	X	X	
Element 4 – Service Area and Facility Map	X	X	X	
Element 5 – Documentation of Water Right	X		X	
Element 6 – Record of Source Water Pumped	X	X	X	
Element 7 – Water Usage	X	X	X	
Element 8 – Water Conservation Program			X	
Element 9 – Wellhead Protection Program	X	X	X	
Element 10 - Component Inventory and Assessment	X	X	X	X
Element 11 – List of System Improvements	X		X	X
Element 12 – Water Quality Monitoring Program	X	X	X	
Element 13 – Operation and Maintenance Program	X	X	X	
Element 14 – Cross-connection Control Program	X	X	X	
Element 15 – Emergency Response Plan	X	X	X	
Element 16 – Budget			X	X

Washington State's SWSMP requires a system to develop technical, operational, managerial and financial capacity. Similar to the WSP program described earlier, a SWSMP contains sixteen elements that are individual yet interrelated. Several of the items in the checklist above develop more than one of the elements of capacity. A system developing a SWSMP, similar to completion of a WSP, enables a system to achieve and maintain capacity status.

When the WAC revisions are adopted, Washington will explicitly require all new NTNC water systems to complete a SWSMP before any new system construction projects can be started. This will ensure that these new NTNC systems commencing operation after October 1, 1999, will demonstrate capacity.

Planned Authority 2 - Certified Operator Requirements

Planned control point 2

DOH will explore requiring all Group A public water systems (including new systems), to have a certified operator in conformance with new program guidance currently being developed by EPA.

Planned basis of authority 2

DOH intends to explore gaining the authority to require a certified operator for all Group A water systems.

Agency vested with planned authority 2

Department of Health

Type of capacity assessed under authority 2

The requirement for all systems to have a certified operator will be designed to ensure that all systems have technical capacity.

II. A Plan for Implementing and Evaluating the Authorities that Ensure New System Capacity

<u>Implementation</u>

Washington State is already implementing the twelve authorities identified in the Existing Authorities Section. In addition, the Planned Authority 1 (Small Water System Management Program) will be implemented when the WAC revisions are adopted (planned for January 1999). Implementation of the Planned Authority 2 (Certified Operator for All Group A Systems) has not been scheduled as yet. This WAC revision will occur when time and resources allow and in conjunction with the new guidelines currently being developed by EPA.

Evaluation

Washington State has elected to evaluate several of the existing authorities to confirm the effectiveness of the capacity development program for new systems. Starting December 1999, Washington will annually determine the effectiveness of the capacity development program by evaluating the following authorities:

Note: The goal/performance measure for each authority is indented and italicized.

- (1) The percentage of systems created that year (starting October 1, 1999 for December 1999 report) that have a current approved Water System Plan. *Goal: 100 percent*
- (2) The total number of approved SMAs operating in the state. *Goal: SMA availability statewide*
- (3) The percentage of new systems, requiring a certified operator, that satisfy the certified operator requirement.

 Goal: 100 percent
- (4) The numbers of established critical water supply service areas.

 Goal: Increase number of new Abbreviated CWSPs and Updates to Existing CWSPs
- (5) The percentage of new sources (serving new systems) in use that have department approvals. *Goal: 100 percent*

The results of the evaluation will be sent to EPA Capacity Development Coordinator for Region 10.

In addition to the authorities to ensure new systems demonstrate capacity, Washington State, when it develops a strategy to assist existing systems with acquiring and maintaining capacity, will be continuously reevaluating these systems to ensure they maintain capacity.

Summary

The preceding document demonstrates Washington State's legal authority to ensure that new community and non transient non community water systems created on or after October 1, 1999 demonstrate technical, managerial, and financial capacity and thereby satisfies the requirement under Section 1420 (a) of the reauthorized SDWA. Any questions should be directed to Peter Beaton, Washington State's Capacity Development Program Coordinator at (360) 236-3150.